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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,501	10/16/2003	Robert Schade	0329.68516	9042
24978	7590	12/22/2005	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606				SCHWARTZ, PAMELA R
ART UNIT		PAPER NUMBER		
		1774		

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/687,501	SCHADE ET AL.
	Examiner	Art Unit
	Pamela R. Schwartz	1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10/11/05.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-27 and 40-46 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-27 and 40-46 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_\_.

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)  
Paper No(s)/Mail Date. \_\_\_\_\_.

6) Other: \_\_\_\_\_.

Art Unit: 1774

1. The language of claim 46 is so broad as to be non-limiting beyond the order of magnitude of the basis weight.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Riou et al. (4,877,686) for reasons of record and for reasons given below.

3. Claims 1, 2 and 4-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riou et al. (4, 877,686) for reasons of record and for reasons given below.

Determination of a basis weight for the support within conventional ranges would have been obvious to one of ordinary skill in the art.

4. Claims 1 and 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riou et al. (4, 877,686) as set forth above and further in view of Moore et al. (4,880,498) for reasons of record and for reasons given below.

5. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Tokunaga et al. (6,403,162) for reasons of record and for reasons given below.

6. Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uemura et al. (6,153,305). The reference discloses a recording sheet having a

swellable layer that may contain polyvinyl alcohol and boric acid (see col. 5, lines 9-34, col. 7, lines 44-65). The layer may be free of pigment (col. 11, lines 5-12, since it may contain pigment, it may be free of pigment as well). As stated in the earlier rejections, cross-linking should inherently form bonds and structures that meet the limitations of claim 1. Epoxy and zirconium compounds that may act as immobilizers may also be present (see col. 7, line 60-66). The cationic polymers of the reference will act to set an anionic ink (see col. 6, line 27 to col. 7, line 43). Based upon these disclosures, it would have been obvious to one of ordinary skill in the art to use these materials to form an ink jet recording material in accordance with Uemura et al.

7. Applicant's arguments filed October 11, 2005 have been fully considered but they are not persuasive. The examiner has considered applicant's declaration as well. There is nothing in the specification that sets forth the type of bonding necessary to meet the claim language. Reading the claims broadly, they read on any type of bonding. Applicants' attempt to rely on language to a sieve or open framework, but once again this is not distinguishable from the framework formed by cross-linking. While cross-linking provides water-resistance, the layer will still facilitate penetration of ink carrier to some degree. The degree necessary is not specified by applicants' claims or specification so that any amount of facilitation meets the instant claim language.

It is also noted that USPN 6,808,767 is directed to an article rather than a method. In addition, the materials referred to at col. 2, lines 60-69 are non-aqueous materials. It is unlikely that the reference at column 2 includes water, the solvent for most ink jet inks. The reference is to grease, solvent and varnish, none of which one of

ordinary skill in the art would take as a reference to aqueous materials. The reference also states that it "fixes an ink droplet as soon as it arrives." This would not occur if the aqueous solvent sat on the surface of the coating layer.

With respect to applicants' references to the "likelihood of success," the examiner believes that this standard refers to the likelihood of success when modifying the primary reference, not the likelihood of success when incorporating applicants' claimed invention into the prior art.

With respect to Tokunaga et al., applicants do not claim a "use" and it is non-statutory to do so. Consequently, references to "use" by applicants are not understood. As above, even if the coating of the reference is water-resistant, it is not water proof and therefore facilitates absorption to some degree.

It is noted that applicants have not claimed particular type of bonds nor have they claimed the method of making the article.

With respect to the declaration, it is not persuasive because it relies on limitations that are not claimed. The cooking process is not claimed. It is not claimed or disclosed that the material does not cross-link. Water resistant is not the same as water proof. Water resistant is still water permeable.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

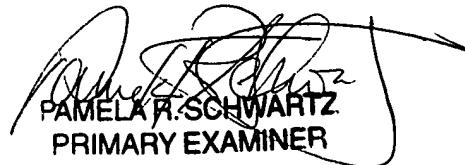
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz  
December 16, 2005



PAMELA R. SCHWARTZ  
PRIMARY EXAMINER